

WHAT IS CLAIMED IS:

1. An aligner to expose any exposure area to light, comprising:
 - a light-emitting device that emits an exposure beam having a specified width to expose the exposure area to light;
 - a douser having a width corresponding to at least the width of the exposure beam; and
 - a drive unit to prevent the exposure beam from reaching an area other than the exposure area by driving the douser to shut off part or all of the exposure beam.
2. The aligner according to claim 1, the douser having a width and a height equal to at least the width of the exposure beam.
3. The aligner according to claim 1, further comprising:
 - a plurality of dousers substantially perpendicular to the direction of emission of the exposure beam and driven separately along either of two intersecting directions; and
 - a drive unit to drive the dousers.
4. The aligner according to claim 1, further comprising:
 - four dousers substantially perpendicular to the direction of emission of the exposure beam and driven separately along either of two intersecting directions; and
 - a drive unit to drive the dousers.
5. The aligner according to claim 1, further comprising:
 - a douser capable of moving substantially perpendicular to the direction of emission of the exposure beam; and
 - a drive unit to drive the douser.
6. The aligner according to claim 1, the light-emitting device shifting the center of the exposure beam within an area of not exceeding a width corresponding to one-half of the width of the exposure beam from the exposure area.
7. The aligner according to claim 1, the drive unit moving the douser so that the exposure beam reaches only the exposure area when the distance between the center of the exposure beam and the boundary of the exposure area is equal to or less than one-half of the width of the exposure beam.
8. An exposing method to expose an exposure area, comprising:
 - a scan control process of moving a center of an exposure beam having a specified width within a scanning area of not exceeding a width corresponding to one-half of the width of the exposure beam from the exposure area; and

a shading control process of shutting off part or all of the exposure beam by moving a douser having a width and a height corresponding to at least the width of the beam to prevent the exposure beam from reaching an area other than the exposure area.

9. The exposing method according to claim 8, the scan control process comprising:

positioning the exposure beam on the boundary of the scanning area;

causing the exposure beam to scan in a first direction;

moving the exposure beam in a second direction by a specified distance when the center of the exposure beam reaches an other end of the scanning area to cause the exposure beam to scan in an opposite direction to the direction in which the scanning was carried out before reaching the other end; and

completing the exposure when the center of the exposure beam has reached the terminal of the scanning area.

10. The exposing method according to claim 8, the scan control process, further comprising:

moving the douser in synchronization with the scanning speed so that the exposure beam does not reach an area other than the scanning area when the center of the exposure beam during the scanning in the first direction is positioned within one-half of the width of the exposure beam from the scanning area toward the area other than the scanning area.

11. A method to manufacture a thin-film transistor, comprising:

a scan control process of shifting the center of an exposure beam having a specified width, with respect to an exposure area on a photosensitive resin, within a scanning area not exceeding a width corresponding to one-half of the width of the exposure beam from the exposure area;

a shading control process of shutting off part or all of the exposure beam by moving a douser having a width and a height corresponding to at least the width of the beam to prevent the exposure beam from reaching an area other than the exposure area;

a mask-pattern forming process of forming a mask pattern by etching the photosensitive resin on which a specified pattern is formed through the scan control process and the shading control process; and

an electrode forming process of forming a gate electrode using the mask pattern.

12. A display device, comprising:
a thin-film transistor manufactured by the method to manufacture a thin-film transistor according to claim 11.
13. An electronic device, comprising:
the display device according to claim 12.